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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,819	12/12/2003	Jani Moilanen	59643.00369	8837

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EXAMINER

DOAN, KIET M

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,819

Applicant(s)

MOILANEN, JANI

Examiner

Kiet Doan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/12/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is response to Remarks file 08/01/2006.

Claims 1, 7, 9, 12-13, 19 are amended.

Claims 20 new.

The office withdrawn rejected claim 19 under 35 U.S.C 101 according to claim amended.

Response to Arguments

Applicant's arguments filed 08/01/2006 have been fully considered but they are not persuasive.

In response to applicant's argument in claim that reference fail to disclose or suggest the feature "receiving a signal from one of a plurality of transmitters at each of a set of said location measurement units and time stamping the signal with the arrival time at each location measurement unit".

Examiner respectfully disagrees, in Willrett (Patent No. 6,430,397) teaches "receiving a signal from one of a plurality of transmitters at each of a set of said location measurement units and time stamping the signal with the arrival time at each location measurement unit" (Abstract, C1, L51-67, C2, L1-16, Fig.1 Illustrate the mobile station (MS) receiving signal from **one of a plurality of** transmitters by satellites/base station (GPS) wherein the transmission can be measurement by geographic position/location and record with time stamps means as recording arrival time. For the sake of clarify "a plurality of transmitters" in Sugiura (U.S 6,140,964) reference teach mobile station (MS)

measure the reception signal from plurality of base station/satellites as Fig.2, Illustrate and described wherein the similarly recited in claims 11 and 19-20).

Therefore, examiner interpreted "receiving a signal from one of a plurality of transmitters at each of a set of said location measurement units and time stamping the signal with the arrival time at each location measurement unit" as broadest reasonable interpretation and it is proper.

In response to applicant's argument that reference fail to disclose or suggest at least the feature " (b) determining from the arrival time at each location measurement unit and its distance from the transmitting transmitter the transmission time;

(c) comparing the transmission times determined for each of the location measurement units and placing on the list only those location measurement units whose transmission times fall in a predetermined range of one another".

Examiner respectfully disagrees, in Sugiura reference teaches "(b) determining from the arrival time at each location measurement unit and its distance from the transmitting transmitter the transmission time;

(c) comparing the transmission times determined for each of the location measurement units and placing on the list only those location measurement units whose transmission times fall in a predetermined range of one another" (Abstract, C4, L1-54, C10, L10-65, teach mobile station measuring the signal strength from plurality base station and the control station determine the position/location of mobile station, stored and compare location/position information. Further clarify C31, L50-67, C32, L1-67,

C33, L1-15. Fig.14b, Illustrate the step of compares the reception of signal wherein the similarly recited in claims 11 and 19-20).

Therefore, Examiner interpreted "(b) determining from the arrival time at each location measurement unit and its distance from the transmitting transmitter the transmission time;

(c) comparing the transmission times determined for each of the location measurement units and placing on the list only those location measurement units whose transmission times fall in a predetermined range of one another" as broadest reasonable interpretation and it is proper.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, to provide means for knowing the accurate location/position of mobile station.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willrett (Patent No. 6,430,397) in view of Sugiura et al. (Patent No. 6,140,964).

Consider **claims 1, 11, 19-20**. Willrett teaches a method of compiling a list of usable neighbour location measurement units in a mobile communications network, the method comprising:

(a) receiving a signal from one of a plurality transmitters at each of a set of said location measurement units and time stamping the signal with the arrival time at each location measurement unit (Abstract, C1, L54-67, C2, L1-16 teach measuring the transmission which mobile station received signal from BTS that recorded and time stamps). Willrett teaches the limitation of claim as discuss **but silent on**

(b) determining from the arrival time at each location measurement unit and its distance from the transmitting transmitter the transmission time;

(c) comparing the transmission times determined for each of the location measurement units and placing on the list only those location measurement units whose transmission times fall in a predetermined range of one another,

wherein the mobile communications network comprises a plurality of transmitters with a plurality of location measurement units.

In an analogous art, Sugiura teaches "Wireless communication system and method and system for detection of position of radio mobile station". Further, **Sugiura teaches**

(b) determining from the arrival time at each location measurement unit and its distance from the transmitting transmitter the transmission time;

(c) comparing the transmission times determined for each of the location measurement units and placing on the list only those location measurement units whose transmission times fall in a predetermined range of one another,

wherein the mobile communications network comprises a plurality of transmitters with a plurality of location measurement units.

(C4, L1-54, C10, L10-50, C25, L35-67, C26, L1-15 teach mobile station measuring the signal strength from plurality base station and the control station determine the position/location of mobile station, stored and compare location/position information. Further clarify C31, L50-67, C32, L1-67, C33, L1-15. Fig.14b, Illustrate the step of compares the reception of signal wherein the similarly recited in claims 11 and 19-20).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Willrett and Sugiura system, such that compiling a list of usable neighbour location measurement units in a mobile communications and a plurality of transmitters with a plurality of location measurement units receiving a signal with time stamps, transmission time, comparing and placing on the list only those location measurement units whose transmission times fall in a

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predetermined range of one another to provide means for knowing the accurate location/position of mobile station.

Consider **claim 2**. Willrett and Sugiura teach a method according to claim 1, wherein steps (a) to (c) are carried out for each transmitter (Willrett teaches step (a) and Sugiura teaches steps (b) and (c) as described above).

Consider **claim 3**. Sugiura teaches a method according to claim 2, when carried out for a predetermined sequence of transmitters at predetermined time intervals (C6, L26-45).

Consider **claims 4**. Sugiura teaches a method according to claim 2, when carried out using a computer program executed on a processor (C25- 67, C26, L1-15 teach the mobile station equipped as notebook size personal communication which can carried out using a computer program executed on a processor).

Consider **claim 5**. Sugiura teaches a method according to claim 2, when carried out at a serving location measurement centre in the network (C14, L1-54, Fig.2 showing the serving location measurement centre in the network).

Consider **claim 6**. Willrett teaches a method according to claim 1, wherein said time stamping is carried out using a global clock (C2, L16-41).

Consider **claims 7 and 14**. Sugiura teaches a method according to claim 1, which comprises the step of identifying one of said set of location measurement units as a target location measurement unit associated with said transmitter;

comparing the transmission times for the remaining ones of the set of location measurement units with the transmission time for the target location measurement unit;

and only placing the target location measurement unit on the list if its transmission time falls in said predetermined range (C10, L10-50, C25, L35-67, C26, L1-15 teach the location information stored means as placing the target location measurement unit on the list and the parameter data means as predetermined range).

Consider **claims 8 and 15**. Sugiura teaches a method according to claim 1, wherein each transmitter is associated with a base station (Fig.2, Illustrate the base station No.202-204 and described)

Consider **claim 9**. Sugiura teaches a method according to claim 1, comprising the step of checking coordinates of a transmitter using the transmission times (C16, L26-42).

Consider **claims 10 and 16**. Sugiura teaches a method according to claim 7, wherein said target location measurement is identified as the location measurement unit physically located at said transmitter (C14, L9-53).

Consider **claim 12**. Sugiura teaches a serving measurement location centre

according to claim 11, wherein the processor is arranged to receive a signal from each of the transmitters (C26, L1-15).

Consider **claim 13**. Sugiura teaches a serving measurement location centre according to claim 12, wherein the processor is arranged to receive a signal from a predetermined sequence of transmitters at predetermined time intervals (C25, L42-67).

Consider **claim 17**. Sugiura teaches a serving measurement location centre according to claim 11, comprising a data store holding data defining the distances of each of the location measurement units from said transmitter (C4, L52-67).

Consider **claim 18**. Sugiura teaches a serving measurement location centre according to claim 17, which comprises means for calculating said transmission times based on said distance data (C9, L35-54).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

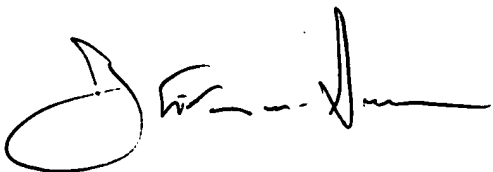
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

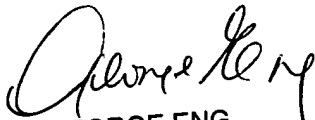
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner



GEORGE ENG
SUPERVISORY PATENT EXAMINER